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| APPLICATION NO.                       | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---------------------------------------|------------------|----------------------|-------------------------|------------------|--|
| 10/055,467                            | 01/22/2002       | Dana Scranton        | 258/116 6380            |                  |  |
| 45540 7                               | 7590 04/18/2006  |                      | EXAMINER                |                  |  |
| PERKINS CO                            | DIE LLP/SEMITOOL | STINSON, FRANKIE L   |                         |                  |  |
| PO BOX 1208<br>SEATTLE, WA 98111-1208 |                  |                      | ART UNIT                | PAPER NUMBER     |  |
| <b>52</b>                             | , 0 1            |                      | 1746                    |                  |  |
|                                       |                  |                      | DATE MAILED: 04/18/2006 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application   | No.   | Applicant(s)   |        |  |  |  |
|--|---|---|---|--|--------|--|--|--|
|  |   | 10/055,467  |   | SCRANTON   |        |  |  |  |
|  | Office Action Summary   | Examiner  |   | Art Unit   |        |  |  |  |
|  |   | FRANKIE L.  | STINSON   | 1746   |        |  |  |  |
| Period fo  | The MAILING DATE of this communication a<br>or Reply  | ppears on the co  | over sheet with the co  | orrespondence ad   | ldress |  |  |  |
| WHIC<br>- Exter<br>after<br>- If NO<br>- Failu<br>Any I  | ORTENED STATUTORY PERIOD FOR REP<br>CHEVER IS LONGER, FROM THE MAILING<br>nsions of time may be available under the provisions of 37 CFR 1<br>SIX (6) MONTHS from the mailing date of this communication.<br>Period for reply is specified above, the maximum statutory perio<br>re to reply within the set or extended period for reply will, by statu-<br>reply received by the Office later than three months after the mail<br>and patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS<br>1.136(a). In no event,<br>d will apply and will ex<br>ite, cause the applicat | COMMUNICATION however, may a reply be time spire SIX (6) MONTHS from to ion to become ABANDONED | l.<br>ely filed<br>he mailing date of this c<br>) (35 U.S.C. § 133). |        |  |  |  |
| Status   |   |   |   |  |        |  |  |  |
| 1)⊠  | Responsive to communication(s) filed on 16  | February 2006   |   |  |        |  |  |  |
| •  | This action is <b>FINAL</b> . 2b) This action is non-final.   |   |   |  |        |  |  |  |
|  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |   |  |        |  |  |  |
| ,—   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |   |  |        |  |  |  |
| Dispositi  | on of Claims  |   |   |  |        |  |  |  |
| 4)   | Claim(s) is/are pending in the applicat   | tion.   |   |  |        |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |   |  |        |  |  |  |
| 5)🖂  | 5)⊠ Claim(s) <u>17,19,20,23,31-37,40,41,43 and 45</u> is/are allowed.   |   |   |  |        |  |  |  |
| 6)⊠  | Claim(s) <u>17,19,20,23,31-37,40,41,43 and 45</u> is/are rejected.  |   |   |  |        |  |  |  |
| 7)   | Claim(s) is/are objected to.  |   |   |  |        |  |  |  |
| 8)   | Claim(s) are subject to restriction and   | or election requ  | uirement.   |  |        |  |  |  |
| Applicati  | on Papers   |   |   |  |        |  |  |  |
| 9)   | The specification is objected to by the Examir  | ner.  |   |  |        |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.                                 |   |   |   |  |        |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                  |   |   |   |  |        |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). |   |   |   |  |        |  |  |  |
| 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.           |   |   |   |  |        |  |  |  |
| Priority u   | ınder 35 U.S.C. § 119   |   | ٠   |  | •      |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).                          |   |   |   |  |        |  |  |  |
| a)[  | a) ☐ All b) ☐ Some * c) ☐ None of:  |   |   |  |        |  |  |  |
|  | 1. Certified copies of the priority documents have been received.   |   |   |  |        |  |  |  |
|  | 2. Certified copies of the priority documents have been received in Application No  |   |   |  |        |  |  |  |
|  | 3. Copies of the certified copies of the priority documents have been received in this National Stage   |   |   |  |        |  |  |  |
|  | application from the International Bureau (PCT Rule 17.2(a)).   |   |   |  |        |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.                               |   |   |   |  |        |  |  |  |
|  |   |   |   |  |        |  |  |  |
| Attachment   | ((s)  |   |   |  |        |  |  |  |
| 1) 🛛 Notic   | e of References Cited (PTO-892)   | . 4)  | Interview Summary (   | PTO-413)   |        |  |  |  |
| 2) 🔲 Notic   | e of Draftsperson's Patent Drawing Review (PTO-948)   |   | Paper No(s)/Mail Dat  | te   | 2 452) |  |  |  |
|  | nation Disclosure Statement(s) (PTO-1449 or PTO/SB/06<br>r No(s)/Mail Date  |   | Notice of Informal Pa   | tent Application (PTC  | J-10Z) |  |  |  |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 17, 20, 22, 23, 31-37, 40, 41, 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima et al. U. S. Pat. No. 5,571,367) in view of Degendt et al. (2002/0011257).

Re claims 17, 34, and 43 Nakajima disclose the cleaning and drying of a workpiece comprising heating the water in the vessel, introducing ozone gas, and rinsing the workpieces that differs from the claim only in the recitation of treating a batch of workpieces, drying with an organic solvent and the bubbling of the ozone. Degendt discloses the batch of wafers (paragraph 0077) the organic solvent (incorporated via U. S. Pat. No. 5,181,985 Lampert et al.) and the bubbling of the ozone(paragraph 0076). It therefore would have been obvious to one having ordinary skill in the art to modify the process to treat a batch, employ an organic solvent and bubble the ozone as taught by Degendt, for the purpose of ensuring complete removal of contaminants as is common in the art. Re claim Nakajima discloses the fresh water overflow.

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In Okuchi et al., Carter et al., Koizumi et al., and Imaoka et al., note the wafer treating processes.
- 4. Applicant's arguments with respect to the pending claims have been considered but are most in view of the new ground(s) of rejection.

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00 pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fls

FRANKIE L. STINSON
Primary Examiner
GROUP ART UNIT 1746